# Checklist for Repair / Maintenance of Process Fans of ATEX Execution Category 2 + 3

<table>
<thead>
<tr>
<th>Fan type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Number:</td>
<td>Year of construction:</td>
</tr>
</tbody>
</table>

Legend: $\checkmark$ = checked and ok. – = not relevant $f$ = faulty (action required)

## GENERAL:
- Visual control for damages or obvious faults?
- For direct coupling: Drive aligned with Laser-Aligning device acc. to manufacturer’s instructions?
- Belts are electrically conducting?
- Alignment of pulleys checked with alignment ruler or laser device?
- Compensators are electrically conductive?
- Screws and bolts of Taperlock hubs of belt drive tightened by torque wrench / double checked? See torque data at "www.nicotra-gebhardt.com / Documentation".
- Belts tensioned acc. to data sheet / double checked?

## CASING:
- When dust-Ex, D or GD, inspection cover present?
- Sealing under mounting plate, intake cone inspection cover, compensator flange and bolt heads present?
- For different categories inside and outside motor flange additionally sealed?
- Painted scroll parts and accessories electrically connected (Conductivity test)?
- For steel execution: Intake cone made of copper?
- Shaft gap sealing having 2 mm gap?
- For steel execution: Shaft gap sealing made of copper and fitted well centred?
- For stainless steel execution: Shaft gap sealing made of stainless steel and fitted well centred?
- P4 and gas tight execution: carbon labyrinth sealing fitted?

## SAFETY DEVICES:
- Guard at casing cover made of copper?
- For P4K: coupling guard made of copper entirely?
- For P4R: Belt guard equipped with copper slide protection at motor and fan pulley side?

## MOTOR:
- For Ex-category outside 2G or 3G: Motor type plate contains information acc. to annexe 1?
- For Ex-category outside 2D or 3D: Motor type plate contains information acc. to annexe 1?
- For lying execution: Motor with cover?

## IMPELLER:
- Painted impeller and hub fitted electrically connected (Conductivity test)?
- Screws and bolts of Taperlock hub of impeller tightened by torque wrench / double checked?
- See torque data at "www.nicotra-gebhardt.com / Documentation".
- Hub safety key present and correctly fitted?
- Gap between impeller and intake cone correspond to manufacturers instructions (Maintenance instructions) / double checked?

## DOCUMENTS
- Maintenance instructions with addendum for ATEX present?
- Maintenance instructions and ATEX certificate of motor present?
- If required: Maintenance instructions and ATEX certificate of gastight sealing present?
- For P4R: Certificate for electrically conductive belts present?
- For Q2M, P9M plug fan: „Evaluation…” present?
- For P2, P4, (P9, others): Declaration of conformity present?

## TEST RUN:
- Test run made?
- Rotational direction of impeller double checked, subjective evaluation of noise of the fan, motor, bearings made?
- Vibration test made?
- Motor current checked?
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Category 2 + 3

Annexe 1: Possible Category Execution of Motor: „Outside“

<table>
<thead>
<tr>
<th>Outside Order Information</th>
<th>Possible indication on Motor Type Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3G</td>
<td>3G T3</td>
</tr>
<tr>
<td>3D</td>
<td>3D T125°C</td>
</tr>
<tr>
<td>2G</td>
<td>2G T3</td>
</tr>
<tr>
<td>2D</td>
<td>2D T125°C</td>
</tr>
</tbody>
</table>

When operating by inverter: Motor must be equipped with certified (tested) PTC-thermistors.

All a. m. operations may only be executed by professionally trained persons.

It must be ensured that no explosion hazard exists during these actions. After having made the checks and interventions it has to be documented which works have been executed. And confirmation has to be made that all relevant prescriptions and checks which are required by the manufacturer have been made prior to putting the fan into operation.

If important changes are made which could reduce the explosion protection a check with an expert will be mandatory. This will not be necessary if the modifications have been made by the manufacturer of the machine concerned.

Only original spare parts supplied by the manufacturer may be used.

If needed our service team can be called. Contact data may be found with www.nicotra-gebhardt.com